Claims 1, 3, 6 and 7 were rejected over Beavers, et al. in view of Balsells. As pointed out by the Examiner, Beavers shows a corrugated spring not a coiled spring. All of the claims require a coiled member, and the spring of Beavers 41 is not a coiled member. Beavers discloses a corrugated spring with sufficient stiffness to provide the desired frictional resistance to rotation. Applicant submits that it would be easier to insert a rotor with a coiled spring within a stator than a rotor having a corrugated spring such as shown in Beavers.

Balsells does not deal with a submersible pump electrical motor. Springs 22a and 22b, as shown in Figure 3, do not prevent rotation of bearing 12b because the shaft does not rotate. Rather, the shaft reciprocates axially. Bearing 16b accommodates misalignment of the shaft, which otherwise would cause wear on the bearing. Springs 22a thus serve to allow floating radial movement of shaft 16 (column 1, lines 43-45 and column 2, lines 56-59). There is no suggestion that springs 22a and 22b would have any resistance to rotation of body 12a since rotation is not a factor. Rather, they serve to allow radial inward and outward movement of body 12a as shaft 16 reciprocates.

Applicant thus submits that there is no suggestion of combining the references. One skilled in the art reviewing Beavers, which deals with preventing rotation of a bearing body, would not look to coiled springs in a bearing body that allows the bearing body to float inward and outward radially to accommodate radial misalignment of the shaft. There is no suggestion that it would be feasible to use the coiled spring of Balsells in place of the corrugated spring of Beavers. Applicant submits that it would not be obvious to do so under §103.

Claims 2, 5, 8, 9 and 11-13 were rejected under 35 U.S.C. §103(a) over Beavers in view of Balsells and further in view of Nogle. Nogle shows springs 39 and 34 for providing radial compliance or floating of bearing sleeve 13 in a manner similar to Balsells. In Nogle, the shaft is a high speed rotating shaft. As explained in the background, Nogle deals with the minimizing the transmission of radial forces and rotor frequency noise resulting from eccentricity or misalignment of the shaft 10 (column 2, lines 8-11). Springs 29 and 34 do not prevent rotation of support 13. Rather, anti-rotation is handled by latch 25, shown in Figure 2. Springs 29-34 thus only allow some floating or radial movement of support 14, which is prevented from rotation by latch 25.

Applicant submits that one skilled in the art would not learn from Nogle that a coiled spring could be used to prevent rotation of a bearing located within an electrical magnetic field

of electrical motor. There is no suggestion in either reference that a coiled spring can prevent rotation of a bearing body. The coiled springs of Balsells and Nogle serve only to allow radial movement of the support, not to prevent rotation of the support.

Claim 4 was rejected over Beavers in view of Balsells and further in view of Ide. Claim 4 requires that the coiled member comprise a plurality of coiled member segments that are spaced apart from each other around the outer periphery of the bearing body. This embodiment is shown in Figure 4. Ide deals with a bearing in an elongated electric motor, however Ide does not teach the use of coiled springs. Rather Ide teaches the use of wheels 37 that are rotatably mounted at the periphery. Wheels 37 protrude to grip the stator to prevent rotation of the bearing, and are aligned with their axes horizontal to permit longitudinal movement of the bearing relative to the stator (column 3, lines 5-7). The purpose for allowing the longitudinal movement is explained at column 1, lines 46-61. When the motor heats up to operating temperature, the rotor will likely grow longitudinally at a greater rate than the stator, causing the bearing to move longitudinally. If the bearing frictionally grips the stator too tightly, this will cause excessive thrust loads on the bearing member due to thermal growth. The wheels thus freely allow longitudinal movement.

There is no suggestion in Ide that a coiled spring, which is in frictional engagement, would be able to allow thermal growth similar to a wheel. The teaching of Ide is to have a rotatable member at the periphery, thus there is no suggestion that it would be advisable to substitute coiled spring segments circumferentially spaced apart from each other. Applicant respectfully submits that claim 4 should be allowed.

It is respectfully submitted that the claims are now in condition for allowance and favorable action is respectfully requested.

Respectfully submitted,

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6. (Amended) The motor according to claim 1, wherein the cavity extends circumferentially along the outer periphery of the bearing body, and the coiled member has a centerline that extends circumferentially around the bearing body.